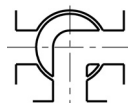
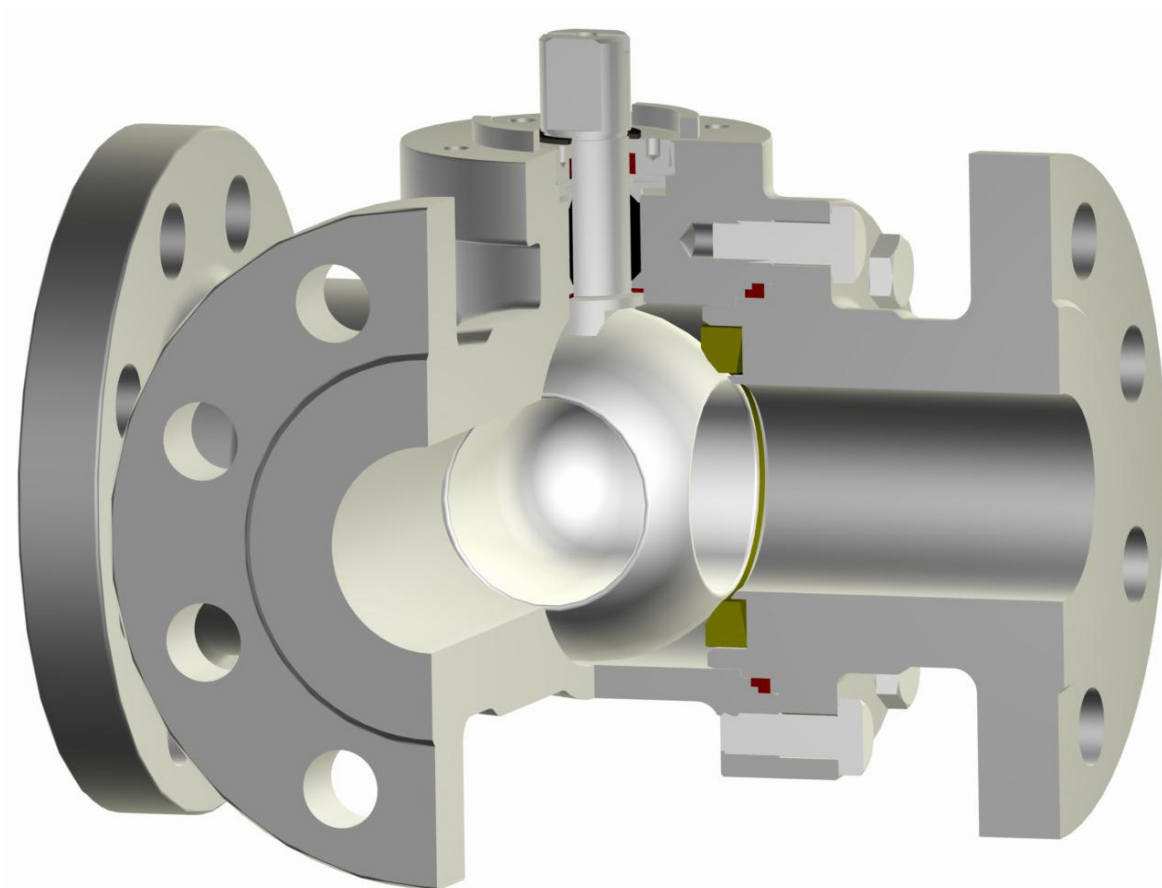




Three-Way Soft Seated Ball Valve Type 27-S



Design Characteristics

- ✓ Two piece body
- ✓ Floating ball
- ✓ Blow out proof stem
- ✓ Live loaded stem packing
- ✓ Fire Safe design optional
- ✓ 90° L-port

Design Standards

- ✓ EN 12516, EN 1983, ISO 5211, AD-2000
- ✓ ASME B16.34, API 608

Range of Application

- ✓ Class 150
Diameter 1" to 6" / DN 25 to 150
- ✓ Class 300
Diameter 1" to 4" / DN 25 to 100
- ✓ -20°F to +400°F / -60°C to +200°C

Approvals

- ✓ "TA-Luft" certified for low fugitive emissions

Testing Standards

- ✓ EN 12266-1/2
- ✓ API 598



Main Parts

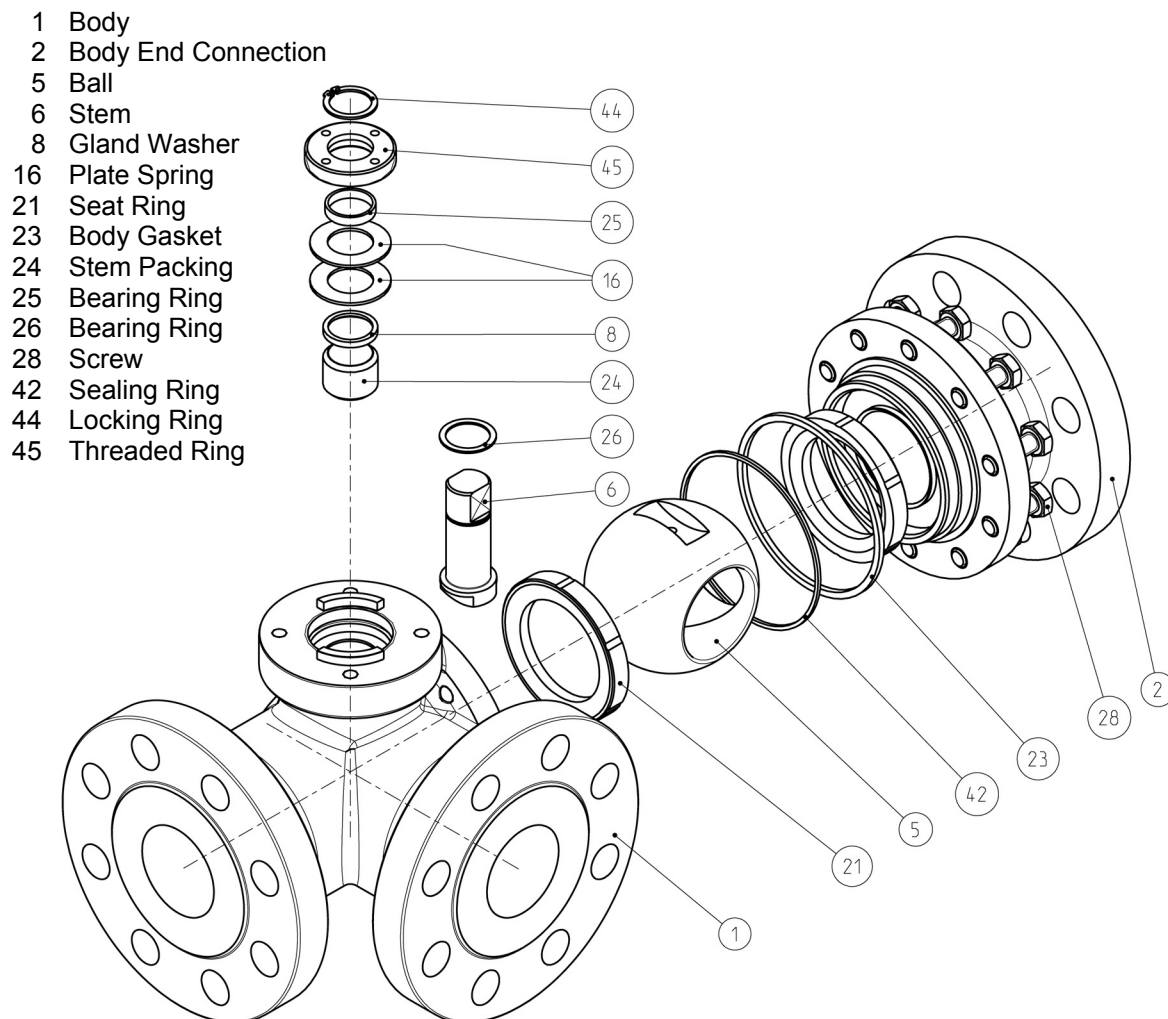


Fig. 1

Description

This PERRIN ball valve design features a two piece body and a floating, seat supported ball. The stem packing is spring loaded and the seat rings are pre-loaded.

The valve is equipped with an integral actuator mounting flange for actuator connection according to ISO 5211. Stem extensions, locking devices and actuators with accessories, can be attached without operating interruptions.

The ball valve has an antistatic design with blow out proof stem. The stem packing and sealings are "TA-Luft" certified for low fugitive emissions.



Parts List / Materials

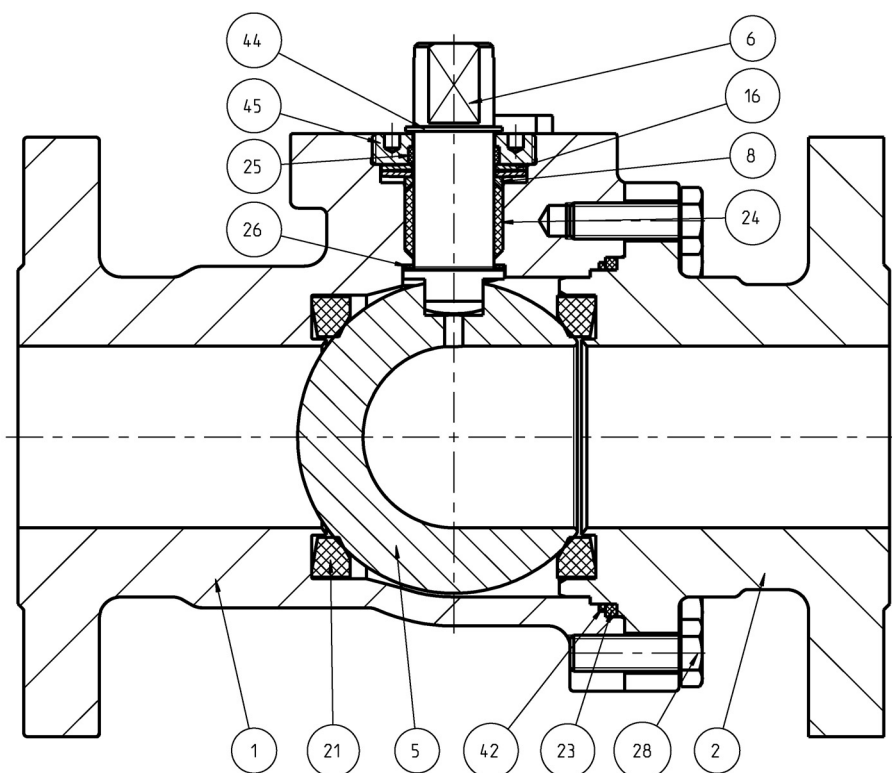


Fig. 2

Item	Designation	ASME		DIN EN	
		-20°F up to +400°F	-20°F up to +400°F	-60°C up to +200°C	-10°C up to +200°C
1	Body	A351 CF8M	A216 WCB	1.4408	1.0619
2	Body End Connection	Type 316	A 105	1.4404	1.0460
5	Ball	Type 316 A351 CF8M	Type 316 A351 CF8M	1.4404 1.4408	1.4404 1.4408
6	Stem	Type 51 Type 316	Type 51 Type 316	1.4462 1.4571	1.4462 1.4571
8	Gland Washer	Type 316	Type 316	1.4571	1.4571
16	Plate Spring	Type 301	Type 301	1.4310	1.4310
21	Seat Ring	Mod. PTFE TFM 4215	Mod. PTFE TFM 4215	Mod. PTFE TFM 4215	Mod. PTFE TFM 4215
23	Body Gasket	Graphite	Graphite	Graphite	Graphite
24	Stem Packing	PTFE-Con. Pigment	PTFE-Con. Pigment	PTFE-Con. Pigment	PTFE-Con. Pigment
25	Bearing Ring	Graphite	Graphite	Graphite	Graphite
26	Bearing Ring	PTFE-Glass	PTFE-Glass	PTFE-Glass	PTFE-Glass
28	Screw	SS	SS	SS	SS
42	Sealing Ring	PTFE-Glass	PTFE-Glass	PTFE-Glass	PTFE-Glass
44	Locking Ring	SS	SS	SS	SS
45	Threaded Ring	Type 316	Type 316	1.4571	1.4571

Tab.1



Technical Data

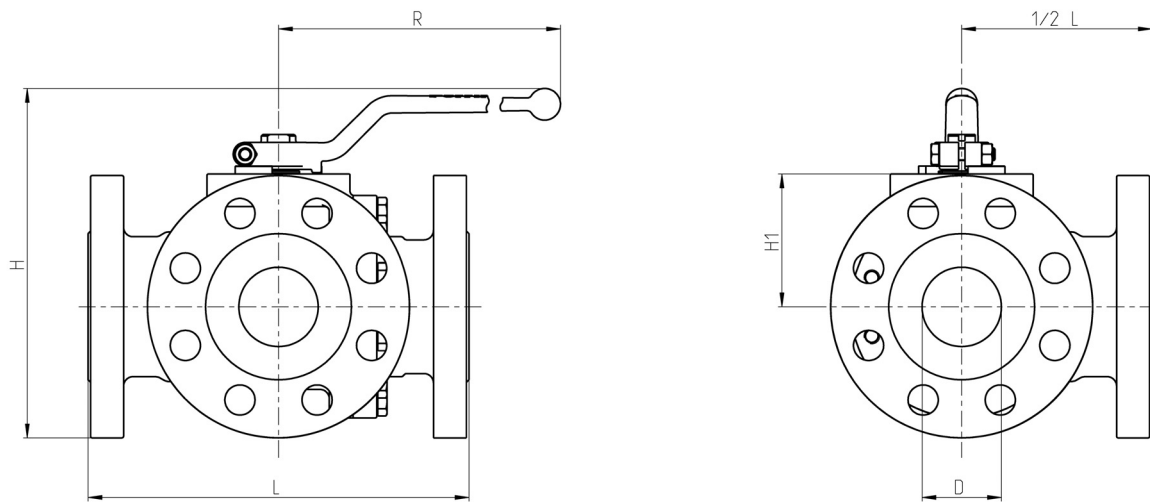


Fig.3

D = NPS = DN = Nominal Size
m = Weight
Cv; Kv = Flow Rate for L-Port

CLASS 150 - Full Bore

NPS [inch]	DN [mm]	H		H1		R		L Perrin Standard		Cv [gal/min]	weight	
		[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]		[lbs]	[kg]
1	25	7,1	180	2,7	68	7	180	7,1	180	66	13	6
1½	40	8	204	3,2	81	12	300	8,3	210	171	24	11
2	50	9,1	230	4,4	112	12	300	8,7	220	267	31	14
3	80	11,9	301	6	156	18	450	10,2	260	687	64	29
4	100	12,7	323	6,6	167	18	450	13	330	1074	97	44
6	150	14,4	365	7,1	180	-	-	16,9	430	2418	216	98

Tab.2

CLASS 300 - Full Bore

NPS [inch]	DN [mm]	H		H1		R		L Perrin Standard		Cv [gal/min]	weight	
		[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]		[lbs]	[kg]
1	25	7,1	180	2,7	68	7	180	8	200	66	18	8
1½	40	8	204	3,2	81	12	300	9	220	171	35	16
2	50	9,1	230	4,4	112	12	300	9	240	267	46	21
3	80	11,9	301	6	156	-	-	11	290	687	84	38
4	100	12,7	323	6,6	167	-	-	14	350	1074	152	69

Tab.3

Other dimensions and pressure classes on request.



Top Work

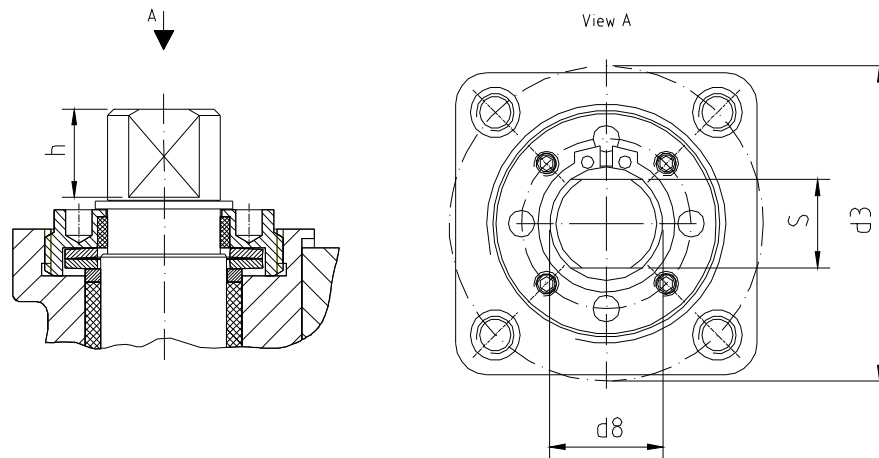


Fig. 4

F	h		s		d3		d8	
	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]
F05	17	0,7	10	0,4	50	2	13	0,5
F07	22	0,9	12	0,5	70	2,8	17	0,7
F10	27	1,1	18	0,7	102	4	27	1,1
F12	38	1,5	32	1,3	125	5	40	1,6
F14	38	1,5	38	1,5	140	6	57	2,2

Tab.4

Actuator-Connection ISO 5211 Full Bore

NPS [inch]	DN [mm]	CLASS	
		150	300
1	25	F05	F05
1½	40	F07	F07
2	50	F07	F07
3	80	F10	F10
4	100	F10	F10
6	150	F14	

Tab.5



Pressure- / Temperature Diagrams

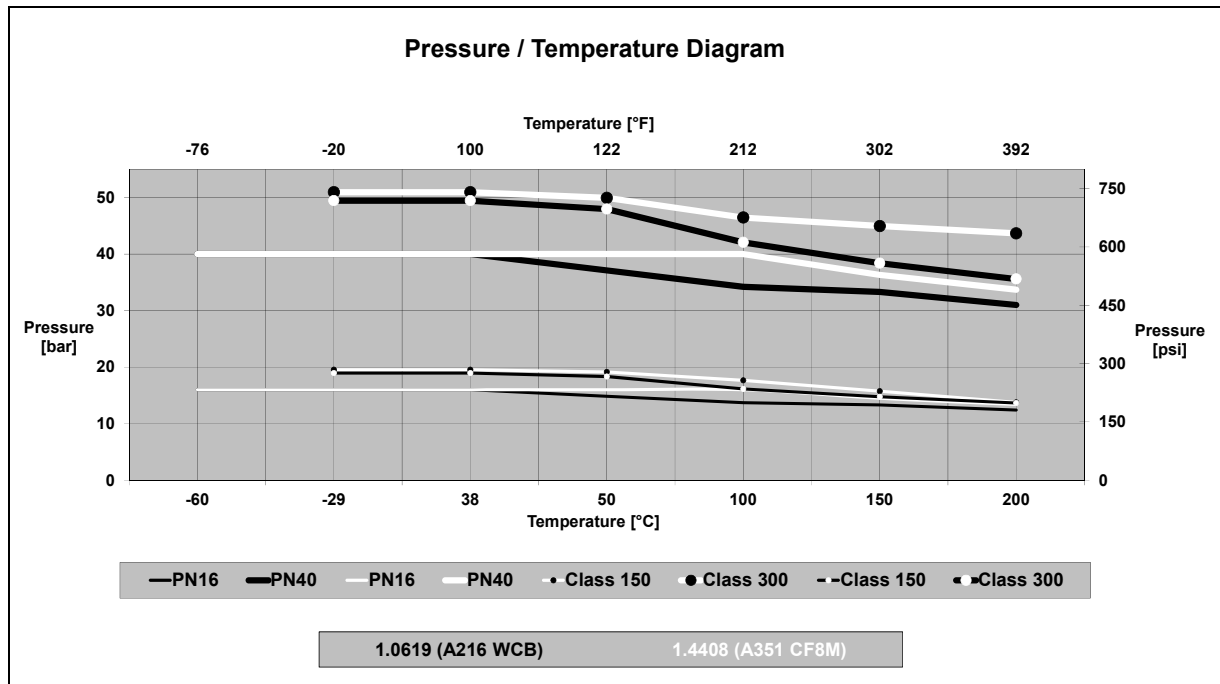


Fig. 5

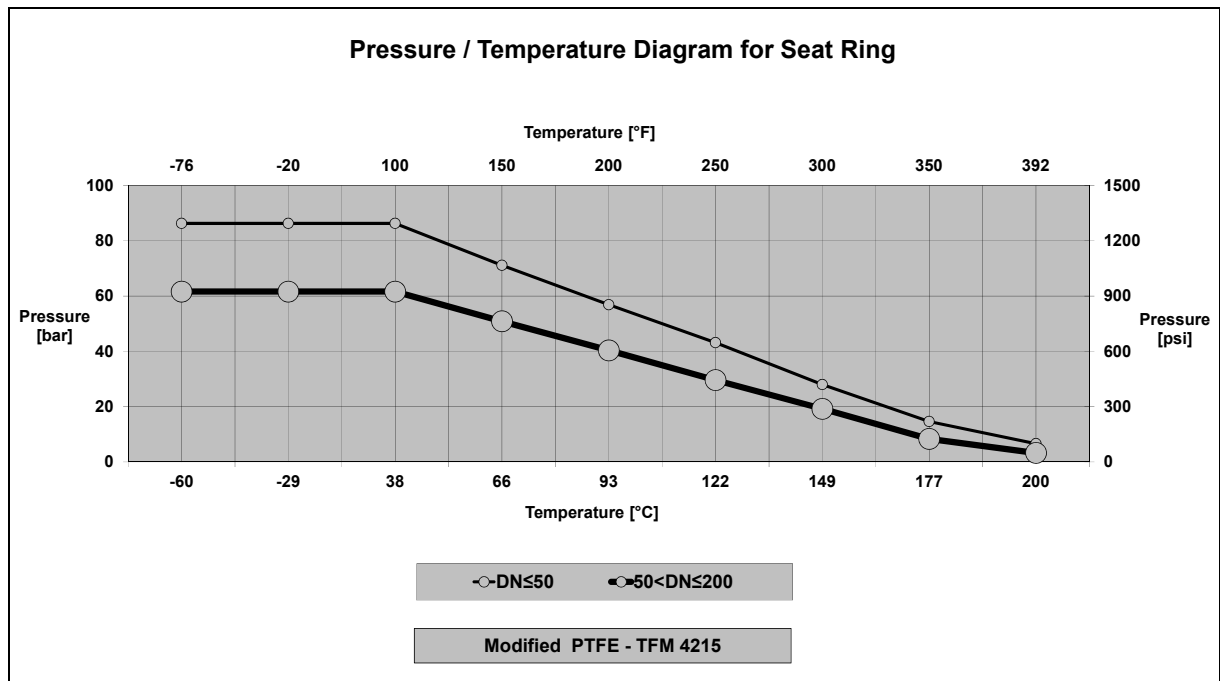


Fig. 6



Options

1) Adjustable stem packing

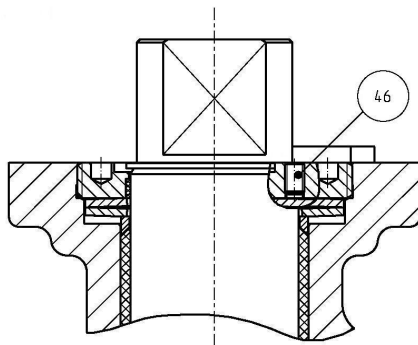


Fig. 7

Additionally the live loaded stem packing can be equipped with hexagon socket screws (46). By fasten the screws it is possible to increase the spring force to the packing in the event of leakage.

2) Locking device

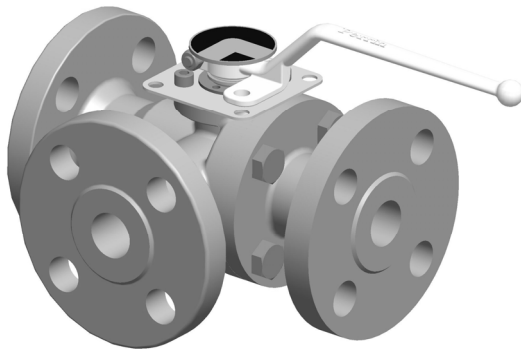


Fig. 8

3) Ball positions

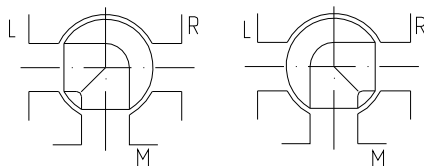


Fig. 9

Technical modifications are reserved.

